

# Ten Major Actions Rolled Out for Carbon Peaking by 2030

By LI Linxu

Soon after unveiling the top-level design to achieve carbon peaking and carbon neutrality, China has rolled out an action plan to peak its carbon dioxide emissions before 2030.

The document, titled *Action Plan For Carbon Dioxide Peaking Before 2030*, details the country's main objectives

and major actions towards carbon peaking.

Carbon peaking is considered as a hallmark event in an economy's green and low-carbon transformation, said an official from the National Development and Reform Commission in response to media queries, adding China's carbon peaking and neutrality goals are fully in line with the goals and requirements of

the *Paris Agreement*.

The plan, released by the State Council, focuses on the 14th Five-Year Plan period and the 15th Five-Year Plan period, which are two crucial periods for carbon peaking.

Over the 14th Five-Year Plan period, notable progress will be made in adjustment and optimization of the industrial structure and the energy mix, according

to the plan.

During the 15th Five-Year Plan period, major progress will be made in adjustment of the industrial structure, and a clean, safe, efficient and low-carbon energy system will be preliminary established, says the plan.

To ensure carbon peaking by 2030, the plan puts forwards ten major actions, including the action for green and

low-carbon energy transition, the action for energy saving, carbon emission mitigation and efficiency improvement, and the action for promoting green and low-carbon transportation.

The plan also calls for the action for advancing green and low-carbon technology. The country will promote the supporting and guiding role of sci-tech innovation and improve the rele-

vant mechanisms and systems, so as to accelerate the revolution in green and low-carbon science and technology.

"A national green technology trade center will be set up to accelerate the commercialization of innovations," says the plan, adding that the intellectual property right protection for green and low-carbon technologies and products will be strengthened.

## Guangdong Eyes Innovation Talent Hub Status

The 40 years of reform and opening up has highlighted Guangdong province's role as a hub for China's opening-up to the outside world. Today, Guangdong has embraced the potent innovative unifying force of the Guangdong-Hong Kong-Macao Greater Bay Area and Shenzhen pilot demonstration zone, as it strives to become a nucleus for global talent.

**Attracting global talents**

Building a high-end innovation platform with international influence has become an important vehicle for Guangdong to gather and cultivate high-level talent.

This April, the 19th Conference on International Exchange of Professionals was held in Shenzhen, attracting more than 10,000 people from home and abroad, including government representatives, experts and scholars.

Another talent exchange event, the 2021 Convention on Exchange of Overseas Talents and the 23rd Guangzhou Convention of Overseas Chinese Scholars in Science and Technology, will be held this December. Until now, the con-

ventions have attracted a taken pool of about 50,000 people from more than 140 countries and regions. Nearly 50,000 projects were born in these conventions.

The Overseas Experts' Visit to Guangdong is also an important brand activity to promote exchanges and cooperation among international sci-tech talent, and to coordinate the development and use of high-end talent resources at home and abroad. Since 2009, more than 70 activities have been held, with in excess of 5000 experts from around the globe invited to network and establish connections.

In addition, building a high-level research and development institute and introducing a high-level team of experts is also an important measure for Guangdong to accumulate high-end innovation resources. A typical example is the Institute for Advanced and Applied Chemical Synthesis of Jinan University, which is jointly established by Jinan University and internationally renowned scientists.

**Implementing talent programs**

In 2020, the Senior Talents Pro-

gram was first proposed for retired researchers. Thanks to this policy, more than 140 high-end experts from over 20 countries and regions took up work opportunities in Guangdong. Horace Loh, a world-renowned pharmacologist, who retired from University of Minnesota in 2019, was enrolled into the program. When speaking of China's talent search, he said, "China has introduced many policies for foreign experts, and there are different projects for different ages. China's policy for overseas experts has reached an unprecedented level, and the most telling evidence is their increasing number coming to work in China."

This August, the notice on the application of high-end talent exchange program in the year 2021 and 2022 was released, in which differentiated projects have been set up for retired experts, foreign experts, and young foreign researchers. This aims to further promote the exchange of talent from international destinations, Hong Kong, Macao and Taiwan to Guangdong, and boost its desire to become a global hub for sci-tech innovation talent.

Guangdong has also introduced a group of international scientists and researchers, to teach, to cultivate talents, and to carry out discipline construction, making positive contributions to Guangdong's sci-tech innovation.

**Fostering an environment for talent development**

Matthias Thurer, production management expert from Germany, applied for the Foreign Permanent Resident ID Card for himself and his family members last year. "In 2019, I received the Guangdong Superior Talent Card. Now with this talent card I've applied for the Permanent Resident ID Card in the hope of having a more convenient work and social life in China," said Thurer.

The implementation of the Guangdong Superior Talent Card system was initiated in December 2018. More than 3,000 talent cards had been issued by this June, providing experts with 14 benefits, including medical treatment, children's schooling, long-term residence and entry and exit.

Guangdong always puts forward new measures to optimize talent benefits. In 2019, twelve measures were issued to promote sci-tech innovation, including adjusting and optimizing major talent projects, taking the lead in implementing a better residence policy, improving expert's visa system, and simplifying visa application procedures for those who work for a short time in the province.

For example, the time limit for approving a foreigner's work permit and residence permit in Shenzhen has been reduced to 7 working days. The introduction of one-stop service greatly improves the approval efficiency.

With innovative mechanisms, simplified procedures and unimpeded channels, Guangdong, an open and diverse province, is sparing no effort to create greater convenience, more security and a better development environment for foreigners to work and live in the province.

**Source: Division of Foreign Expert Services, Department of Science and Technology of Guangdong Province; Guangdong Science & Technology Cooperation Center**

### Column



Canton Tower, at the south bank of the Pearl River, is the landmark of Guangzhou city. (PHOTO: VCG)

## Innovation Drives Guangdong's High-quality Development

By GONG Guoping

As the south gate of China and the starting point of Maritime Silk Road, Guangdong has long been one of the most open, dynamic and innovative regions in China.

The province has actively participated in international cooperation and competition over the past 40-plus years of reform and opening up, and its GDP has ranked No.1 among China's provinces for 32 consecutive years.

Driven by sci-tech innovation, the province has topped *China's Regional Innovation Capability Rank* for four consecutive years. Innovation has become the primary driving force for Guangdong's high-quality development.

During the 14th Five-Year Plan period (2021-2025), Guangdong is going to embrace the building of Guangdong-Hong Kong-Macao Greater Bay Area (GBA) and make sci-tech self-reliance and self-strengthening as a strategic support, in order to be an international sci-tech and industrial innovation center. By 2025, it will have initially established a technological and industrial innovation highland with global influence.

To play good the first move of sci-tech innovation for Guangdong, one of the important focuses is to strengthen the layout of strategic sci-tech power, and to develop an elite force of science and technology capabilities.

In recent years, 10 provincial laboratories have been built in batches in Guangdong. Up to date, it has 30 state key labs, 430 provincial key labs, 21 high-level innovation institutes, and 20 Guangdong-Hong Kong-Macao joint labs.

Behind these numbers are the province's optimized lab building system and talent introduction system, as well as the continuous system and mechanism innovation.

To make the most of the siphon effect of talent introduction and talent accumulation from major innovation platforms, Guangdong is accelerating the layout of major sci-tech infrastructure clusters and is building an array of national major innovation platforms.

It is also accelerating the construction of big-science facilities, such as Phase II of China Spallation Neutron Source project in Dongguan, Jiangmen Underground Neutrino Observatory, and High Intensity Heavy-ion Accelerator Facility in Huizhou.

To play good the first move, another important focus is to explore Guangdong's path to achieving breakthroughs of key core technologies. Focusing on

the bottlenecks, it has continuously implemented research and development plans in key fields of the province.

By March this year, Guangdong's financial expenditure on "First Move" projects, such as quantum communication, core chips, and 5G, has amounted to 7.1 billion RMB, driving social investment of more than 15 billion RMB.

Next, Guangdong is to carry out a new round of Three-Year R&D planning in key fields of the province, and to implement national key R&D projects, such as the project of novel display and strategic electronic materials.

Meanwhile, the province attaches great importance to the role of enterprises as the main body of innovation, promoting high-tech enterprises to improve development quality and supporting various sized enterprises to integrate and innovate.

To create a favorable ecological environment for innovation, Guangdong is doing its utmost to satisfy talents near and far, win their hearts and minds, and retain their valuable skills.

Talent is the first resource for Guangdong's high-quality development. Striving to build an international sci-tech innovation hub, the province will implement a more open talent policy to attract talents, encourage innovation, and incubate a comprehensive talent pool.

Aiming to create a virtuous cycle between industries and talents, Guangdong will focus on industrial chains to build talent chains, specifically in ten pillar industry clusters and ten emerging industry clusters.

At the starting point of a new era, Guangdong will take the building of GBA into an international sci-tech innovation center as the key link, continue to improve sci-tech innovation systems and mechanisms, strive to make breakthroughs in key core technologies, and leverage the strength of sci-tech innovation and institutional innovation, so as to provide strategic support for the province's social and economic high-quality development.

Foreign experts and talents have always been an important part of Guangdong's innovation system. We sincerely welcome talents from home and abroad to Guangdong for innovation and entrepreneurship to build a better future together.

**Gong Guoping is Secretary of the Leading Party Group and Director of Department of Science and Technology of Guangdong Province.**

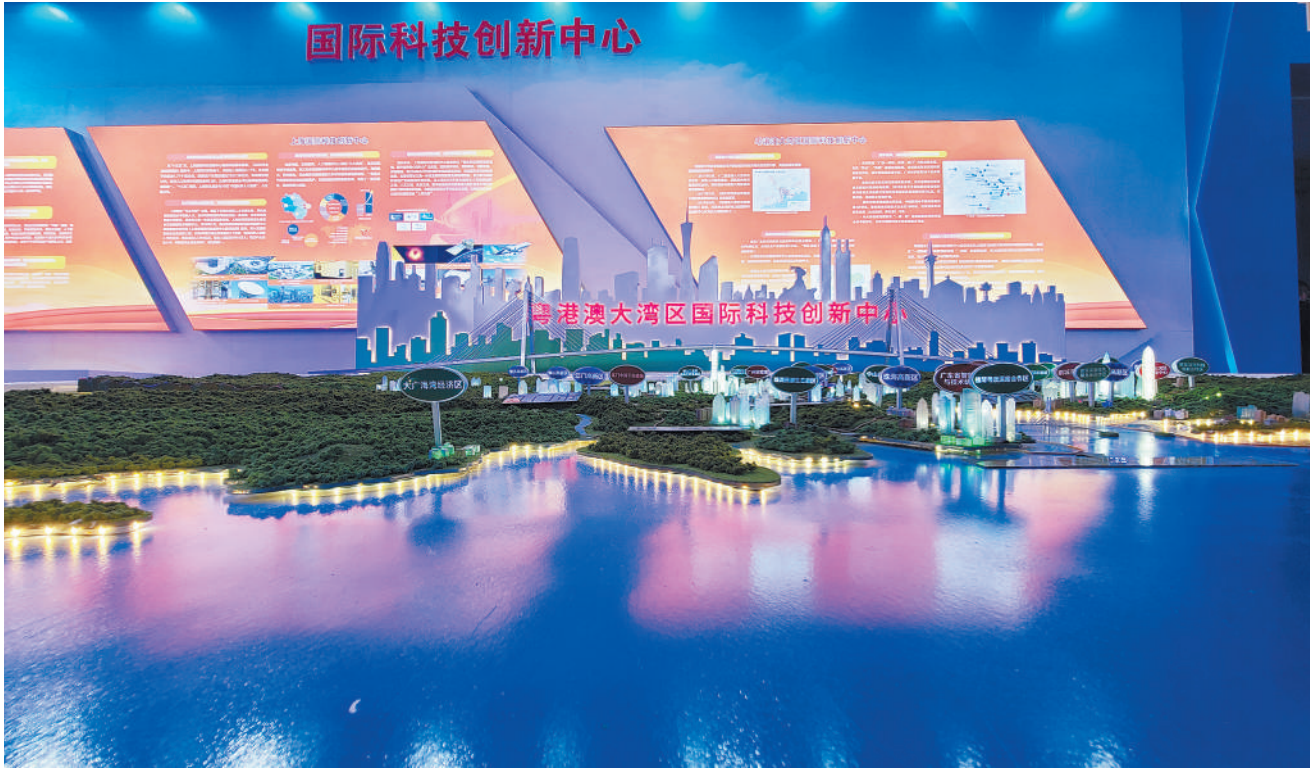


Photo taken on Oct. 27 shows the international sci-tech innovation centers featuring GBA at an exhibition on China's major sci-tech accomplishments during the 13th Five-Year Plan period in Beijing. (PHOTO: Li Linxu)

## Chengdu-Chongqing Economic Circle: A New Growth Driver in Western China

By CHEN Chunyou

China released its master plan for the construction of the Chengdu-Chongqing economic circle in the southwest of the country on October 20.

The Chengdu-Chongqing economic circle is another important regional development strategy, following the Beijing-Tianjin-Hebei region, the Yangtze River Delta region, and the Guangdong-Hong Kong-Macao Greater Bay Area.

The plan proposes nine key tasks, including building a new pattern for the economic development of the two cities, jointly building a modern infrastructure network, a modern industrial system, a sci-tech innovation center with international influence, an ecological protective fence, a new base for reform and opening-up in the inland regions, and promoting integrated urban-

rural development.

Covering about 185,000 square kilometers, the Chengdu-Chongqing economic circle had a permanent population of about 96 million and a GDP of nearly 6.3 trillion RMB in 2019, accounting for 6.9 percent and 6.3 percent of the national total respectively.

According to the plan, all urban areas will be covered by the 5G network, and the economic circle will see a marked improvement in new infrastructure and stronger capabilities in safeguarding energy security by 2025.

Besides, universities in the region are encouraged to enroll students from all over the world and introduce respected postdoctoral researchers and young scholars. The joint construction of institutes, and R&D centers by top universities and research institutes at home and abroad is supported, which

will offer long-term, flexible and attractive research positions.

In the future, the Chengdu-Chongqing region will promote construction of the Chengdu-Chongqing comprehensive science center, said the plan. In addition, it will optimize the layout of innovation space, improve the ability of collaborative innovation and create an innovation-encouraging policy environment, which jointly serves to build higher-level sci-tech innovation platforms and promote a higher-level collaborative innovation.

The region will also focus on developing strategic products in the fields of nuclear energy, aerospace, smart manufacturing and electronic information. A number of major sci-tech infrastructures will be appropriately equipped in the Sichuan Tianfu New Area and the Chongqing Hi-tech Indus-

trial Development Zone, jointly building a hub for sci-tech innovation, said the plan.

A regional collaborative innovation system will be basically completed in the region, with the investment in R&D reaching about 2.5 percent of its GDP, and the contribution rate of sci-tech progress reaching 63 percent by 2025.

In the next five years, the Chengdu-Chongqing economic circle will witness great progress in economic strength, development vitality and international influence. The region's role of supporting the country's high-quality development will be significantly enhanced.

By 2035, the economic circle will develop into an active growth pole and a powerful driver with international influence, said the plan.